

CLAIMS

1. Paper or cardboard comprising the components of flour in the paper fiber matrix.
2. Paper or cardboard according to claim 1, comprising 0.1-8 wt.% starch and 0.3-2.4 wt.% protein in the paper fiber  
5 matrix, calculated on the weight of the dry substance.
3. Paper or cardboard according to claim 1 or 2, comprising 2-5 wt.% starch 0.2-1 wt.% protein in the paper fiber matrix.
4. Paper or cardboard according to any one of the  
10 preceding claims, wherein the components originate from agricultural products, for instance pulses and grains such as pea meal and wheat flour.
5. A method for manufacturing paper or cardboard, wherein at least flour is subjected to a treatment known in the paper  
15 industry for native starch, after which the treated components of flour are jointly introduced into the paper fiber matrix in one step.
6. A method according to claim 5, wherein the flour is treated with a chemical and/or enzymatic starch chain-  
20 degrading agent and is then introduced into the paper fiber matrix utilizing a size press.
7. A method according to claim 6, wherein the protein fraction of the flour is rendered water-soluble.
8. A method for manufacturing paper, wherein vegetable  
25 material of a high protein and starch content, preferably grain, is processed completely, comprising separating the vegetable material into (a) a fraction substantially consisting of the cellulose material and (b) a fraction substantially consisting of the protein and starch material,  
30 feeding fraction (a) to the usual fiber mass, and feeding the

fraction (b) according to any one of claims 5-7 in a step wherein fiber-reinforcing additives are introduced.

9. Use of unseparated flour components in the fiber matrix of paper or cardboard for improving or adjusting the strength properties, stiffness properties, permeability, surface properties and elasticity of the paper.

10. Use of unseparated flour components as glue for fixing the corrugations in corrugated cardboard.